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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,392	02/05/2004	Hiroshi Iwai	2004_0139A	3062
513	7590	06/14/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			PHAN, THO GIA	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/771,392

Applicant(s)

IWAI ET AL.

Examiner

Tho G. Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 16 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 14, 15 and 17-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/25/04, 5/25/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 23 is objected to because of the following informalities:

In claim 23, line 1, "claim 1" should change to —claim 4—(so as to support for the phrase "the upper housing").

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Garay et al (4,313,119).

Garay et al in figures 2-8 disclose a portable communication apparatus comprising a housing, wherein at least one part of the housing is formed as a housing electrical conductor portion 21,22 (column 2, lines 53-64) by an electrically conductive material and wherein the housing electrical conductor portion is connected with a radio communication circuit (not shown, inherently via cable 47) of the portable radio communication apparatus so as to operate as at least one part of an antenna (column 2, lines 62-63) of the radio communication circuit, the radio apparatus is a straight type portable radio communication apparatus (figures 6-8), and the housing conductor portion is made by forming an electrical conductor layer 21/22 on a dielectric housing 20 which is at least one part of the housing.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garay et al in view of Ying et al (6,307,511).

Garay et al have been discussed above but fail to teach the antenna is an unbalanced type antenna, a folding radio in which an upper housing and a lower housing are foldable through a hinge portion, and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing electrical conductor portion by an electrically conductive material, and electrical conductor patterns/portions. However, Ying et al in figures 4-7 disclose the antenna 60 is an unbalanced type antenna, a folding radio in which an upper housing 12 and a lower housing 14 are foldable through a hinge portion 26, and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing electrical conductor portion by an electrically conductive material (column 2, lines 24-26), and electrical conductor patterns/portions 62,64 (figures 6-7, column 2, lines 24-32). It would have been obvious to provide the antenna is an unbalanced type antenna, a folding radio in which an upper housing and a lower housing are foldable through a hinge portion, and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing electrical conductor portion by an electrically conductive material, and electrical conductor patterns/portions as

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taught by Ying et al for the purpose of impedance matching and operating in a plurality of frequency bands.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garay et al in view of the WO publication (99/04500) [submitted by applicant].

Garay et al have been discussed above but fail to teach a slide type portable radio in which an upper housing and a lower housing are slidable through a sliding mechanism and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing conductor portion by an electrically conductive material. However, the WO publication (99/04500) in figure 5 discloses a slide type portable radio in which an upper housing 2 and a lower housing 19 are slidable through a sliding mechanism (groove between the upper/lower housing) and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing conductor portion by an electrically conductive material 9 (abstract). It would have been obvious to provide a slide type portable radio in which an upper housing and a lower housing are slidable through a sliding mechanism and wherein at least one part of at least one of the upper housing and the lower housing is formed as a housing conductor portion by an electrically conductive material as taught by the WO publication (99/04500) for the purpose of sliding the upper/lower housing relative to one another as needed for antenna operation.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garay et al in view of the JP publication (2001156898) [submitted by applicant].

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Garay et al have been discussed above but fail to teach a slot or slit which is formed the conductive layer. However, the JP publication (2001156898) discloses a slot or slit which is formed the conductive layer 3 (figures 1-2, 4-5, 7, 11). It would have been obvious to provide a slot or slit which is formed the conductive layer as taught by the JP publication (2001156898) for the purpose of providing a lighter portable radio assembly (abstract).

7. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garay et al in view of Ali (6,885,880).

Garay et al have been discussed above but fail to teach the insulated electrical hinge conductor portion is connected with the radio communication circuit of the portable radio so as to operate as at least one part of the antenna. However, Ali discloses the hinge conductor portion 172,174 being connected with the radio communication circuit 190 of the portable radio so as to operate as at least one part of the antenna (column 5, lines 24-40). It would have been obvious to provide Garay et al with the insulated electrical hinge conductor portion being connected with the radio communication circuit of the portable radio so as to operate as at least one part of the antenna for the purpose of providing multi-mode frequency bands.

#### Allowable Subject Matter

8. Claims 11-12, 14-15 and 17-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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9. Claim 23 would be allowable if rewritten to overcome the above listed objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

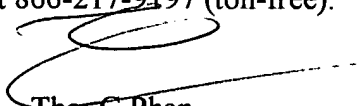
*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Edvardsson, Waldron, Johnson and Ponce De Leon et al are cited as of interested and illustrated a similar structure to a portable radio assembly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho G. Phan whose telephone number is 571-272-1826. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tho G Phan  
Primary Examiner  
Art Unit 2821